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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,498	06/28/2001	Shigekazu Yamagishi	10873.735USW	3994

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EXAMINER

CRUZ, MAGDA

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	Application No. 09/869,498	Applicant(s) YAMAGISHI ET AL.	
	Examiner Magda Cruz	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 25 September 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 09/25/2002 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "color shading eliminating means having a light incident side lenticular lenses that are *arranged so that the lengthwise axes thereof are directed in a vertical direction* for converging incident light from the collimating means in a horizontal plane" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-9 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

a. In claims 1-3, the applicant failed to have enough disclosure on the specification and the drawings, regarding to the "color shading eliminating means having a light incident side lenticular lenses that are arranged so that the lengthwise axes thereof are directed in a vertical direction for converging incident light from the collimating means in a horizontal plane".

b. Claims 4-9 falls with parent claim.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 2-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirata et al.

Hirata et al. (US Patent Number 5,485,308) discloses a rear-projection image display (1) comprising a trichromatic image projection section (7R, 7G, 7B) corresponding to the colors of red, green, and blue (column 13, lines 32-33). The three image projecting section includes an image display element (8R, 8G, 8B) and an image

illuminating lens for enlarging, superimposing and projecting the image to be displayed (column 13, lines 34-41). The screen (i.e. rear-projection display) includes collimating means (i.e. Fresnel lens; element 2) for converting incident light having a predetermined flare and from each of the image projecting sections into telecentric light and allowing the telecentric light to exit (column 13, lines 41-43). A color-shading eliminating means (3) having on its light-incident-side lenticular lenses (31) for converting incident light from the collimating means (2) in a horizontal plane, and on its light-exit-side lenticular lenses (32) having one-to-one correspondence to the light-incident-side lenticular lenses (31), to allow principal rays of the respective lights of the colors (10R, 10G, 10B) to be substantially parallel with one another (column 14, lines 9-16), the respective lights being from the image projecting sections (7R, 7G, 7B) and having passed through the collimating means (2). A light diffusing means (4) including on its light-incident surface, lenticular lenses (41) that converges incident light from the color-shading eliminating means (3); black stripes (16) formed with a material having a light absorbing property (column 5, lines 43-44) in a region except for places where the incident light is converged (42), a light diffusing layer (15) made of a material containing a light diffusing material (column 5, lines 30-33), and a material of the substrate being non-colored or colored (column 12, lines 34-36); wherein a focal length of each of the light-exit-side lenticular lenses (32) of the color-shading eliminating means (3) is substantially equal to a distance (column 16, lines 18-23) therefrom to corresponding one of the light-incident-side lenticular lenses (31), and the width in a horizontal direction (Figure 33; column 23, lines 49-52) is formed by each of the light-incident-side lenticular lenses (31)

corresponding to each of the light-exit-side lenticular lenses (32). A color shading eliminating means (3) having a light incident side lenticular lenses (31) that are arranged so that the lengthwise axes thereof are directed in a vertical direction for converging incident light from the collimating means in a horizontal plane (column 7, lines 14-33).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al. in view of Dubin et al.

Hirata et al. (US Patent Number 5,485,308) teaches the salient features of the present invention, except a plurality of micro beads made of a transparent material provided on the light-incident surface of the substrate sheet, light transmitting portions being formed between the substrate sheet and the micro beads and the light-incident surface of the substrate sheet, except for the light transmitting portions that is covered with an opaque binder.

Dubin et al. (US Patent Number 6,278,548 B1) discloses a plurality of micro beads (80) made of a transparent material provided on the light-incident surface (column 12, lines 10-15) of the substrate sheet (85), light transmitting portions (82)

being formed between the substrate sheet (85) and the micro beads (80) and the light-incident surface of the substrate sheet, except for the light transmitting portions (82) that is covered with an opaque binder (81).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the plurality of micro beads on the light-incident surface of the substrate sheet disclosed by Dubin et al. in combination with Hirata et al.'s invention, for the purpose of providing an angle re-distributing prescreen that minimizes or eliminates the screen sensitivity to the projector location, in conjunction with a screen having established screen characteristics.

### ***Response to Arguments***

9. Applicant's arguments filed 09/25/2002 have been fully considered but they are not persuasive.

The applicant has argued that the prior art does not teach the "a color shading eliminating means having a light incident side lenticular lenses that are *arranged so that the lengthwise axes thereof are directed in a vertical direction* for converging incident light from the collimating means in a horizontal plane". However, Hirata et al. (US Patent Number 5,485,308) teaches such color shading eliminating means (3) having a light incident side lenticular lenses (31) that are arranged so that the lengthwise axes thereof are directed in a vertical direction for converging incident light from the collimating means in a horizontal plane. This is taught in column 7, lines 14-33. Furthermore, the

limitation added to the independent claims 1-3 failed to have enough disclosure on the specification and the drawings.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoshida, et al. (US Patent Number 6,421,181 B1) discloses a lenticular lens sheet containing optical diffusing particles to diffuse light in vertical planes.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magda Cruz whose telephone number is (703)308-